

CLAIMS

What is claimed is:

1. A method comprising:
 - detecting an occurrence of a privileged event;
 - determining which one of a plurality of virtual machine monitors (VMMs) is to handle the privileged event; and
 - transitioning control to said one of the plurality of VMMs.
2. The method of claim 1 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.
3. The method of claim 1 wherein determining which one of a plurality of VMMs is to handle the privileged event comprises:
 - determining a type of the privileged event; and
 - identifying one of the plurality of VMMs that is designated to handle privileged events of the determined type.
4. The method of claim 1 wherein determining which one of a plurality of VMMs is to handle the privileged event comprises:
 - accessing a field associated with the privileged event in a resource; and
 - identifying one of the plurality of VMMs that is designated to handle the privileged event based on a value of the field.

5. The method of claim 4 wherein the field associated with the privileged event is a field associated with a type of the privileged event.
6. The method of claim 4 wherein the field associated with the privileged event is a field associated with an input-output address range to which an input-output address of the privileged event belongs.
7. The method of claim 4 wherein the value of the field associated with the privileged event is either predetermined or dynamically configurable.
8. The method of claim 1 wherein determining which one of a plurality of VMMSs is to handle the privileged event comprises:
evaluating resource usage parameters of the plurality of VMMSs; and
identifying one of the plurality of VMMSs that is designated to handle the privileged event based on evaluation of the resource usage parameters.
9. The method of claim 4 wherein the resource resides in any one of a memory, a processor, a chipset, and an input-output device.
10. The method of claim 1 wherein the privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

11. The method of claim 1 wherein the privileged event occurs during an operation of guest software.
12. The method of claim 1 wherein the privileged event occurs during an operation of one of the plurality of VMMS.
13. A system comprising:
 - a plurality of virtual machine monitors (VMMS); and
 - routing logic to detect an occurrence of a privileged event, to determine which one of the plurality of VMMS is to handle the privileged event, and to transition control to said one of the plurality of VMMS.
14. The system of claim 13 wherein the plurality of VMMS includes a main VMM and one or more parallel VMMS.
15. The system of claim 13 wherein the routing logic is to determine which one of the plurality of VMMS is to handle the privileged event by determining a type of the privileged event, and identifying one of the plurality of VMMS that is designated to handle privileged events of the determined type.
16. The system of claim 13 wherein the routing logic is to determine which one of the plurality of VMMS is to handle the privileged event by evaluating resource usage parameters of the plurality of VMMS, and identifying one of

the plurality of VMMs that is designated to handle the privileged event based on evaluation of the resource usage parameters.

17. The system of claim 13 wherein the privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

18. The system of claim 13 wherein the privileged event occurs during an operation of guest software.

19. The system of claim 13 wherein the privileged event occurs during an operation of one of the plurality of VMMs.

20. A system comprising:

a memory having stored therein guest software and a plurality of virtual machine monitors (VMMs); and

a processor, coupled to the memory, to execute the guest software, to detect an occurrence of a privileged event, to determine which one of the plurality of VMMs is to handle the privileged event, and to transition control to said one of the plurality of VMMs.

21. The system of claim 20 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.

22. The system of claim 20 wherein the processor is to determine which one of the plurality of VMMs is to handle the privileged event by determining a type of the privileged event, and identifying one of the plurality of VMMs that is designated to handle privileged events of the determined type.
23. The system of claim 20 wherein the processor is to determine which one of the plurality of VMMs is to handle the privileged event by evaluating resource usage parameters of the plurality of VMMs, and identifying one of the plurality of VMMs that is designated to handle the privileged event based on evaluation of the resource usage parameters.
24. The system of claim 20 wherein the privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.
25. The system of claim 20 wherein the privileged event occurs during operation of any one of guest software and one of the plurality of VMMs.
26. A machine-readable medium containing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:
- detecting an occurrence of a privileged event;

determining which one of a plurality of virtual machine monitors (VMMs) is to handle the privileged event; and transitioning control to said one of the plurality of VMMs.

27. The machine-readable medium of claim 26 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.
28. The machine-readable medium of claim 26 wherein the privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.
29. The machine-readable medium of claim 26 wherein the privileged event occurs during operation of any one of guest software and one of the plurality of VMMs.